

WHAT IS CLAIMED IS:

1. An information medium comprising:
an data object formed of one or more data object
units each of which serves as a prescribed data unit;
5 control information of said data object;
access unit data used for accessing an access unit
which is a part of contents of said data object, said
access unit data being contained in said control
information; and
- 10 a bitstream being formed of a series of packets,
said bitstream including contents of said data object
and contents of said control information.
2. The medium of claim 1, wherein said access
unit data includes at least one of:
15 first information indicating which of said data
object units contains said access unit; and
second information indicating which of said data
object units contains an end of a segment of said
bitstream, said segment being associated with the
20 access unit of said data object.
3. An information medium comprising an data
object formed of one or more data object units each
of which serves as a prescribed data unit; control
information of said data object; access unit data
25 used for accessing an access unit which is a part of
contents of said data object, said access unit data
being contained in said control information; and

a bitstream being formed of a series of packets, said bitstream including contents of said data object and contents of said control information,

wherein said packets include:

5 one or more stream packets containing one or more application packets; and

partial application packets obtained by splitting said application packets across boundaries of said stream packets.

10 4. The medium of claim 3, wherein said packet includes an application header extension being used to store information that can differ from one application packet to another application packet.

15 5. The medium of claim 3, wherein each of said application packets has an application timestamp at the leading portion thereof.

20 6. A method of recording bitstream information that comprises an data object formed of one or more data object units each of which serves as a prescribed data unit; control information of said data object; access unit data used for accessing an access unit which is a part of contents of said data object, said access unit data being contained in said control information; and a bitstream being formed of a series of packets, said bitstream including contents of said data object and contents of said control information,
25 wherein said bitstream information is recorded on

an information recording medium.

7. A method of recording bitstream information on an information recording medium, said bitstream information comprising an data object formed of one or more data object units each of which serves as a prescribed data unit; control information of said data object; access unit data used for accessing an access unit which is a part of contents of said data object, said access unit data being contained in said control information; and a bitstream being formed of a series of packets, said bitstream including contents of said data object and contents of said control information,
5 wherein said packets include one or more sequential or continuous stream packets containing one or more application packets; and partial application
10 packets obtained by splitting said application packets across boundaries of said sequential or continuous stream packets,
15 wherein each of said application packets has an application timestamp at the leading portion thereof,
and
20 wherein, when said bitstream information is recorded on said information recording medium, a first byte of said application timestamp of a first one of said application packets is aligned to a start of an application packet area in a first one of said stream packets, said first one of said stream packets being
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located at beginning of said data object.

8. The method of claim 6, wherein said packets include one or more stream packets containing one or more application packets; and

5 wherein said application packets are split across boundaries of said stream packets to provide partial application packets.

9. The method of claim 7, wherein said packets include one or more stream packets containing one or 10 more application packets; and

 wherein said application packets are split across boundaries of said stream packets to provide partial application packets.

10. A method of reproducing bitstream information that comprises an data object formed of one or more data object units each of which serves as a prescribed data unit; control information of said data object; access unit data used for accessing an access unit which is a part of contents of said data object, said access unit data being contained in said control information; and a bitstream being formed of a series of packets, said bitstream including contents of said data object and contents of said control information, wherein contents of said bitstream is reproduced from said bitstream information based on said access unit data.

25 11. A method of reproducing bitstream information

that comprises an data object formed of one or more data object units each of which serves as a prescribed data unit; control information of said data object; access unit data used for accessing an access unit
5 which is a part of contents of said data object, said access unit data being contained in said control information; and a bitstream being formed of a series of packets, said bitstream including contents of said data object and contents of said control information,
10 wherein contents of said bitstream is reproduced from said bitstream information, based on said access unit data,
wherein said packets include one or more sequential or continuous stream packets containing one
15 or more application packets; and partial application packets obtained by splitting said application packets across boundaries of said sequential or continuous stream packets,
20 wherein each of said application packets has an application timestamp at the leading portion thereof, and
wherein, when a first byte of said application timestamp of a first one of said application packets is aligned to a start of an application packet area in a
25 first one of said stream packets located at beginning of said data object, the split one of said partial application packets is reproduced based on contents of

access information provided in said stream packets.

12. A stream information recording apparatus for recording received stream information with support information, comprising:

- 5 means for preparing management information relating to the stream information;
- means for detecting the support information relating to the stream information;
- means for adding the detected support information to the prepared management information; and
- means for recording on a recording medium the received stream information and the prepared management information to which the detected support information is added.

15 13. The apparatus of claim 12, wherein said stream information contains a prescribed access unit, and said support information includes at least one of:

- information indicating a start position of said access unit; and
- information indicating an end position of said access unit.